

Barrow CE School

Computing Long Term Provision Map

Year A Acorn Class Autumn	Year A Acorn Class Spring	Year A Acorn Class Summer
Topic and Key Knowledge	Topic and Key Knowledge	Topic and Key Knowledge
Year 1 Autumn, Term 1	Year 1 Spring, Term 1	Year 1 Summer, Term 1 and 2
Internet Safety	Programming	Multimedia
Sticky Knowledge	Sticky Knowledge	Sticky Knowledge
I know how to use technology safely. I know where to go for help if I am concerned.	I can give instructions to my friend and follow their instructions to move around.	I know how to use technology to present some of my ideas.
I know how to keep my personal information private.	I know what happens when I press buttons on a programmable robot.	I know how to save information and retrieve it. I know how to use the keyboard or a word bank
I know which websites are safe me to use.	I know what an algorithm is. I know how to create a set of instructions and	to enter text.
I know how to use an iPad camera to take photographs.	plan a journey for a programmable toy.	EYFS Starting Points How do I move objects on a screen?
EYFS Starting Points	I know what the word debug means when I correct mistakes.	How do I create shapes and writing on a screen?
Why do we use the internet?	I know how to use some apps/software to create	How can I use technology to help me with my learning?
What do I do if something worrying or unexpected happens when I'm using the internet?	movement	

How do I stay kind to my friends?	EYFS Starting Points	
How much time should I spend using a computer/tablet/game device?	Which computer games and software do I like to use?	
What can technology be used for?	What happens when I touch or click on buttons when I'm using simple software?	
	How do I make a programmable toy move?	
Internet Safety Vocabulary	Handling Data Vocabulary	Multi Media Safety Vocabulary
internet, device, computer, laptop, iPad, tablet, camera, personal information	software, programmable toy, instructions, algorithm, debug, test	keyboard, word bank, drawing program, save, retrieve
Year 1 Autumn, Term 2	Year 1 Spring Term, 2	
Technology in our Lives	Handling Data	
Sticky Knowledge	I can talk about the different ways in which	
I know how we use technology in our classrooms	information can be shown.	
I know how technology is used at home.	I know how to use technology to collect information, including photos, video and sound.	
I understand the benefits of using technology.	I know how to sort different kinds of information and present it to others.	

I know how to use links to websites to find	I know how to add information to a simple graph	
information.	e.g. block graph or pictogram and talk about what	
	I have found out.	
EYFS Starting Points		
What technology do we use in school?	EYFS Starting Points	
	Tell me about the different kinds of information	
What technology do we use at home?	we have e.g. pictures, video, text and sound	
What technology do you use e.g. iPads, laptop, etc.	How do we take a photograph on an iPad/tablet?	
How can technology be used to help me play and learn?		
Technology in our lives vocabulary	Handling Data vocabulary	
device, laptop, computer, iPad, tablet, mobile	data, pictogram, block graph, popular, least	
phone, game console, X Box, Switch, Playstation,	popular, camera, photograph, sound,	
TV	microphone, record	

Year A Oak Class Autumn	Year A Oak Class Spring	Year A Oak Class Summer
Topic and Key Knowledge	Topic and Key Knowledge	Topic and Key Knowledge
Autumn, Term 1	Spring, Term 1	Summer Term 1 & 2
Internet Safety	Handling Data	Multimedia
Sticky Knowledge	Sticky Knowledge	Sticky Knowledge
I know why I need to keep my password and personal information private.	I can talk about the different ways I use technology to collect information, including a camera, sound recorder and possibly a	I know how to use technology to organise and present my ideas in different ways.
I can describe the things that happen online that I must tell an adult about.	microscope. I know how to make and save a chart or graph	I can use the keyboard on my device to add, delete and space text for others to use.
I know why I should only go online for a short amount of time.	using the data I have collected. I can talk about the data that is shown in my chart	I can tell you about an online tool I can use that can help me to share my ideas with other people.
I know why it is important to be kind and polite online and in real life.	or graph. I know what type of information I could use to	I know how to save and open files on the device I am using.
I know that not everyone is who they say they are on the internet.	help me investigate a question.	
	I can start to tell you about a branching database.	
Internet Safety vocabulary	Handling Data vocabulary	Multimedia vocabulary
Internet safety, personal information, online rules, concerns, password	data, information, frequency, graph, chart, most popular, least popular, block graph, pictogram, bar chart	keyboard, mouse, screen, save, open, retrieve, delete, space, text, image, font, colour, size

Autumn, Term 2	Spring, Term 2
Programming	Technology In Our Lives
Sticky Knowledge	Sticky Knowledge
I know how to give instructions to my friend (using forward, backward and turn) and physically follow their instructions.	I can tell you why I use technology in the classroom.
I can tell you the order I need to do things to make something happen and talk about this as an algorithm.	I know how to use the keyboard on my device to add, delete and space text for others to read. I can tell you about an online tool that will help
I know how to program a robot or software to do a particular task.	me to share ideas with other people. I can tell you what kind of information I could use to help me investigate a question.
I can look at my friend's program and tell you what will happen.	
I know how to use programming software to make objects move.	
I know how to debug simple programmes after I have noticed it has gone wrong.	
Programming vocabulary	Technology in our lives vocabulary
algorithm, instructions, debug, program, forwards, backwards, left, right, full turn, quarter turn, half turn	laptop, computer, keyboard, delete, space, enter, text, image

Year B Oak Class Autumn	Year B Oak Spring Term	Year B Oak Class Summer
Topic and Key Knowledge	Topic and Key Knowledge	Topic and Key Knowledge
Autumn, Term 1	Spring, Term 1	Summer, Term 1 & 2
Internet Safety	Handling Data	Multimedia
Sticky Knowledge	Sticky Knowledge	Sticky Knowledge
I know what makes a secure password and know why passwords are important.	I can talk about the different ways data can be organised.	I know how to create different effects with different technology tools.
I know how to protect my personal information when I do different things online.	I know how to search a ready-made database to answer questions.	I know to combine a mixture of text, graphics and sound to share my ideas and learning.
I can use the safety features of websites as well as knowing how to report concerns to an adult.	I know how to answer a question by collecting data.	I know how to use appropriate keyboard commands to amend text on my device, including making use of a spell checker.
I know how to make good choices about how long I spend online.	I know how to add to a database. I know how to make a branching database.	I know how to evaluate my work and improve its effectiveness.
I can recognise websites and games appropriate	The state of the s	
for my age.	I know how to use a data logger to monitor changes and talk about the information collected.	I can use an appropriate tool to share my work online.
I know to ask an adult before downloading files and games from the internet.		
I know the importance of posting positive comments online.		

Internet safety vocabulary	Handling Data vocabulary	Multimedia vocabulary
Internet safety, personal information, online rules, concerns, password, positive comments	database, branching database, data, data logger, pictogram, bar char, block graph, frequency, least/most popular	keyboard, graphics, image, spell checker, text, sound, word, drawing programs
Autumn, Term 2	Spring, Term, 2	
Programming	Technology In Our Lives	
Sticky Knowledge	Sticky Knowledge	
I know how to break an open-ended problem up into smaller parts.	I know how to save and retrieve work on the internet, the school network or my own device.	
I can put programming commands into a sequence to achieve a specific outcome.	I can talk about the different parts of the computer.	
I know how to keep testing my program and can recognise when I need to debug it.	I know some of the different ways of communicating online.	
I know how to use repeated commands.	I can talk about the World Wide Web as the part of website that contains websites.	
I can describe the algorithm I will need for a simple task.	I know how to use search tools to find and use an appropriate website.	
I can explain how to detect a problem in an algorithm which could result in unsuccessful programming.	appropriate website.	

algorithm, instructions, debug, program, forwards, backwards, left, right, full turn, quarter turn, half turn, clockwise, anticlockwise, repeat command, sequence, decomposition, programming World Wide Web (www), internet, websites, laptop, device, computer, iPad, tablet, mobile phone, network, save, retrieve, keyboard, screen

Year A Willow Class Autumn	Year A Willow Class Spring	Year A Willow Class Summer
Topic and Key Knowledge	Topic and Key Knowledge	Topic and Key Knowledge
Autumn, Term 1	Spring, Term 1	Summer, Term 1 & 2
Internet Safety	Handling Data	Multimedia
Sticky Knowledge	Sticky Knowledge	Sticky Knowledge
I know what makes a password secure and why they are important.	I know some of the different ways data can be organised.	I know how to create different effects with different technology tools.
I know the importance of protecting my personal information when I do different things online.	I know how to search a ready-made database to answer questions.	I know how to combine a mixture of text, graphics and sound to share my ideas and learning.
I know how to use the safety features of websites and know when to report concerns to an adult.	I can collect data to help me answer a question. I know how to add to a database.	I know how to use appropriate keyboard commands to amend text on my device, including making use of a spellchecker.
I can recognise websites and games that are	T KNOW HOW to dud to a database.	making use of a spelleneeker.
appropriate for my age.	I know how to make a branching database.	I know how to evaluate my work and improve its effectiveness.
I know how to make good choices about how long	I know how to use a data logger to monitor	effectiveffess.
I spend online.	changes and talk about the information collected.	I can use an appropriate tool to share my work online.
I know to ask an adult before downloading files and games from the internet.		omme.
I know to only post positive comments online.		

Internet Safety vocabulary	Handling Data vocabulary	Multimedia vocabulary
Internet safety, personal information, online	database, branching database, data, data logger,	keyboard, graphics, image, spell checker, text,
rules, concerns, password, positive comments	pictogram, bar char, block graph, frequency,	sound, word, drawing programs
	least/most popular, pie chart	
Autumn, Term 2	Spring, Term 2	
Programming	Technology in Our Lives	
Sticky Knowledge	Sticky Knowledge	
I know how to break up an open-ended problem	I know how to save and retrieve work on the	
into smaller parts (decomposition).	internet, the school network or my own device.	
I know how to put programming commands into a sequence to achieve a specific outcome.	I know the different parts of the computer.	
·	I know how I should be communicating with	
I know to test my program and can recognise when I need to debug it.	others online.	
	I can describe the World Wide Web as part of the	
I know how to use repeat commands.	internet that contains websites.	
I can describe the algorithm I need for a simple task.	I know how to use search tools to find and use an appropriate website.	
I know how to detect a problem in an algorithm	I know how to use image that I find online in my	
which could result in unsuccessful programming.	own work.	
Programming vocabulary	Technology in our lives vocabulary	
algorithm, instructions, debug, program,		
forwards, backwards, left, right, full turn, quarter		

turn, half turn, clockwise, anticlockwise, repeat	World Wide Web (www), internet, websites,
command, sequence, decomposition,	laptop, device, computer, iPad, tablet, mobile
programming	phone, network, save, retrieve, keyboard, screen

Year B Willow Class Autumn	Year B Willow Class Spring	Year B Willow Class Summer
Topic and Key Knowledge	Topic and Key Knowledge	Topic and Key Knowledge
Autumn, Term 1	Spring, Term 1	Summer, Term 1 & 2
Internet Safety	Handling Data	Multimedia
Sticky Knowledge	Sticky Knowledge	Sticky Knowledge
I know the importance of choosing a secure password and username.	I know how to use a spreadsheet and database to collect and record data.	I know how to use text, photo, sound and video editing tools to refine my work.
I know to protect my password and other personal information.	I can choose an appropriate tool to help me collect data.	I know how to select, use and combine the appropriate technology tools to create effects that will have an impact on others.
I can explain how to protect myself and my	I can present data in an appropriate way.	
friends and the best way to do this. This includes		I can select an appropriate online tool to share
reporting concerns to an adult.	I know how to search a database using different operators to refine my search.	ideas.
I know that anything I post online can be seen,		I can review and improve my own work and
used and may affect others.	I understand how mistakes in data can be checked.	support others to improve their work.
I know the dangers of spending too long online or	circulation of the circulation o	
playing a game.		

	T	T
I know the importance of communicating kindly and respectfully.		
I know the importance of choosing an age appropriate website, app or game.		
I can explain why I need to protect my computer or device form harm		
Internet Safety vocabulary	Handling data vocabulary	Multimedia vocabulary
username, secure password, age appropriate websites/games/apps, digital footprint, cyberbullying, personal information	data, spreadsheet, database, search, operators, pie chart, bar chart, frequency table, axis	text, image, sound, record, save, retrieve, powerpoint, word, excel,
Autumn, Term 2	Spring, Term 2	
Programming	Technology in Our Lives	
Sticky Knowledge	Sticky Knowledge	
I know how to decompose a problem into smaller parts.	I can describe different parts of the internet.	
I know how to design an algorithm for a specific outcome and use this to write a program.	I know how to use different online tools for different purposes.	
I know how to use a variable e.g. lives in a game, points in a game, use a counting timer to measure	I know how to use a search engine to find appropriate information and check its reliability.	
time.	I know how to evaluate different types of information I find on the World Wide Web.	

I know how to change an input to a program to achieve a different outcome.		
I know how to use 'if' and 'then' commands to		
select an action.		
I know how to use logical reasoning to detect and		
debug mistakes in a program.		
Programming vocabulary	Technology in our lives vocabulary	
outcomes, input, output, logical reasoning,	,	
algorithm, debug, 'if' command, 'then' command,	search engines, reliability, internet	
variable, decompose, decomposition		

Year C Willow Class Autumn	Year C Willow Class Spring	Year C Willow Class Summer
Topic and Key Knowledge	Topic and Key Knowledge	Topic and Key Knowledge
Autumn, Term 1	Spring, Term 1	Summer, Term 1 & 2
Internet Safety	Handling Data	Multimedia
Sticky Knowledge	Sticky Knowledge	Sticky Knowledge
I know how to protect my password and other personal information.	I know how to select the most appropriate tool to collect data for my investigation.	I can decide how I would like to present my ideas.
		I can combine a range of media, recognising the
I can explain the consequences of sharing too	I can collect my own data and interpret it.	contribution of each to achieve a particular
much about myself online.		outcome.
	I can present the data I collect in an appropriate	
I know how to support my friends to protect	way.	I can explain why I select a specific online tool for
themselves online, including reporting concerns		a specific purpose.
to an adult.		
		I can evaluate my own work and that of others.

I can explain the consequences of spending too		
much time online or on a game.		
I can explain the consequences of not		
communicating kindly and respectfully online.		
I know how to protect my computer or device		
from harm on the internet.		
Internet Safety vocabulary	Handling data vocabulary	Multimedia vocabulary
username, secure password, age appropriate	data, spreadsheet, database, search, operators,	text, image, sound, record, save, retrieve,
websites/games/apps, digital footprint,	pie chart, bar chart, frequency table, axis	powerpoint, word, excel
cyberbullying, personal information		
Autumn, Term 2	Spring, Term 2	
Programming	Technology in Our Lives	
Sticky Knowledge	Sticky Knowledge	
I know how to deconstruct a problem into smaller	I can select an appropriate tool to communicate	
steps, recognising similarities to solutions used before.	and collaborate online.	
Scioic.	I can talk about the way search engines are	
I can explain and program each of the steps in my	selected and ranked.	
algorithm.		
I know how to evaluate the effectiveness and		
efficiency of my algorithm while I continually test		
the programming of that algorithm.		
I know how to use a variable and operators to		
stop a program.		

I can use different inputs to control a device or onscreen action and predict what will happen.		
I know how to use logical reasoning to detect and correct errors in algorithms and programs.		
Programming vocabulary	Technology in our lives vocabulary	
outcomes, input, output, logical reasoning, algorithm, debug, 'if' command, 'then' command,	search engines, ranking,	
variable, decompose, decomposition	-	